

Abstract

5 Dental caries in man may be prevented or treated by oral ingestion of  
human or humanized murine monoclonal IgG and IgM antibodies that bind to surface  
10 antigens of cariogenic organisms, such as *S. mutans*. The genetically engineered  
monoclonal antibodies engage the effector apparatus of the human immune system  
when they bind to cariogenic organisms, resulting in their destruction. In a preferred  
embodiment, monoclonal antibodies to cariogenic organisms are produced by edible  
plants, including fruits and vegetables, transformed by DNA sequences that code on  
expression for the desired antibodies. The antibodies are applied by eating the plants.